

K022846

JAN 28 2003

## 510(k) Summary

### SW-180 Shortwave Therapy Unit

Common/Classification Name: Shortwave Diathermy Device, 21 CFR 890.5290

Ito Company, Ltd.  
3-3-3 Toyotama-Minami  
Nerima-Ku  
Tokyo 176-8605, Japan

Contact: H. Okazaki, Prepared: August 26, 2002

#### A. LEGALLY MARKETED PREDICATE DEVICES

The **SW-180 Shortwave Therapy Unit** is substantially equivalent to the Megapulse II (K973732) manufactured by Electro-Medical, Ltd.

#### B. DEVICE DESCRIPTION

The **SW-180 Shortwave Therapy Unit** consists of a main unit and a standard applicator. Several other types of applicators are available as options. The device may be operated in continuous or pulsed modes. The **SW-180** has an output power of 80 W and operates at  $27.12 \pm .16$  MHz.

The device has an LED screen that serves as the interface with the user to specify options, provide messages, and display parameters.

The **SW-180 Shortwave Therapy Unit** device is a prescription device and the prescription statement is contained in the labeling as required.

#### C. INTENDED USE

The **SW-180** is indicated for use in applying therapeutic deep heat in body tissues for the treatment of selected medical conditions, including relief of pain, muscle spasms, and joint contractures.

#### D. SUBSTANTIAL EQUIVALENCE SUMMARY

The **SW-180 Shortwave Therapy Unit** is a medical device, and it has very similar indications for use as the legally marketed predicate device. The differences do not change the intended therapeutic effect. The **SW-180 Shortwave Therapy Unit** has the same technological characteristics

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technological characteristics as the predicate device. This premarket notification has described the characteristics of the **SW-180 Shortwave Therapy Unit** in sufficient detail to assure substantial equivalence except for a few of the characteristics where performance testing was carried out (e.g., electrical safety, EMC).

**E. TECHNOLOGICAL CHARACTERISTICS**

The technological characteristics are the same as those of the predicate device and other shortwave diathermy devices.

**F. TESTING**

Performance testing carried out by Ito Co, Ltd. on the **SW-180** addressed the following issues:

- (1) Electrical Safety;
- (2) Electromagnetic Compatibility;
- (3) Heating Patterns
- (4) Various Integrity Checks

**G. CONCLUSIONS**

This pre-market notification has demonstrated Substantial Equivalence as defined and understood in Sections 513(f)(1) and 513(i)(1) of the Federal Food Drug and Cosmetic Act and various guidance documents issued by the Center for Devices and Radiological Health.



JAN 28 2003

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

ITO Co., Ltd.  
C/o T. Whit Athey, Ph.D.  
Health Policy Resources Group, LLC  
2305 Gold Mine Road, Suite 200  
Brookeville, MD 20833-2233

Re: K022846  
Trade/Device Name: SW-180 Shortwave Therapy Unit  
Regulation Number: 21 CFR 890.5290  
Regulation Name: Shortwave diathermy  
Regulatory Class: II  
Product Code: IMJ  
Dated: December 28, 2002  
Received: December 30, 2002

Dear Dr. Athey:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

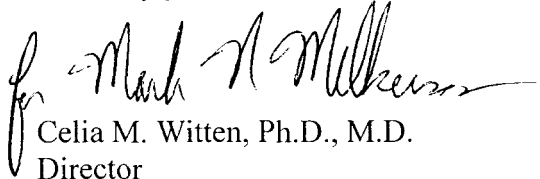
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

Page 2 – Dr. T. Whit Athey

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (301) 594-4659. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>

Sincerely yours,

A handwritten signature in black ink, appearing to read "Celia M. Witten". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Celia M. Witten, Ph.D., M.D.  
Director  
Division of General, Restorative  
and Neurological Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

STATEMENT OF INDICATIONS FOR USE

510(k) Number (if known): K 022846

Device Name: SW-180 Shortwave Therapy Unit

Indications For Use:

The **SW-180** is indicated for use in applying therapeutic deep heat in body tissues for the treatment of selected medical conditions, including relief of pain, muscle spasms, and joint contractures.

(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)

\_\_\_\_\_  
Concurrence of CDRH, Office of Device Evaluation (ODE)

Prescription Use ✓  
(Per 21 CFR 801.109)

OR

Over-The-Counter Use \_\_\_\_\_

*[Signature]*  
\_\_\_\_\_  
Division Sign-Off  
Division of General, Restorative  
and Neurological Devices

510(k) Number K 022846

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